## REMARKS

This application has been carefully reviewed in light of the Office Action dated January 25, 2005. Claims 1 to 3, 5 to 10, and 12 to 17 are in the application, of which Claims 1, 15 and 16 are independent. Reconsideration and further examination are respectfully requested.

Amendments have been made to the specification and to the claims so as to address the objections and rejections lodged against them.

Claims 1 to 10 and 12 to 17 were rejected under 35 U.S.C. § 102(b) over U.S. Patent 6,047,227 (Henderson), and Claim 11 was rejected under § 103(a) over Henderson in view of page 3 of the subject application. The rejections are all respectfully traversed.

The invention concerns a data storage format for storage of topography data, comprised of a first section for storing topography data, a second section for storing information concerning a reference entity by which the topography data is determined, and a third section for storing information concerning a topography direction along which the topography data is measured or calculated. As described in the specification, such a data storage format provides topography data in a format readily usable by data-processing applications that find a need to register the topography data with other image data, while also providing the topography data in a format that is easily usable by data-processing applications that do not find such a need. More specifically, data-processing applications that involve registration of the topography data to other image data are able to utilize

information stored in all three sections of the data storage format, so as to obtain good registration between the topography data and the other image data; whereas those data-processing applications that do not involve fusion simply utilize the topography data stored in the first section.

Henderson discloses a method of operating geography-altering machinery such as an electrohydraulic control system of earth-moving machinery developed by Caterpillar, Inc. Referring to Henderson's Figure 1, digitized models of the actual and desired geographies for the site are loaded or stored at block 104, and a differencing algorithm 102 retrieves, manipulates and updates the site models from block 104 and generates at 106 a dynamic site database of the difference between the actual site model and the desired site model.

The Office Action took the position that block 104 corresponded to the first section for storing topography data, that block 104 again corresponded to the claimed second section for storing information concerning the reference entity, and that differencing algorithm 102 corresponded to the claimed third section for storing information concerning the topography direction along which the topography data is measured or calculated. For his part, the Applicant respectfully submits that the Office Action has drawn an incorrect correspondence, as discussed more fully below.

First and foremost, it is Applicant's position that Henderson does not disclose any data storage format whatsoever. Block 104 is perfectly consistent with an ordinary input block that accepts data, but the format of the data is unspecified. Block 102 is not a data storage format at all, and is specifically described by Henderson as a

"differencing algorithm" that manipulates data input from block 104. Thus, as Applicant sees it, Henderson does not disclose a data storage format that comprises a first section for "storing" topography data in relation to a reference entity with respect to which the topography data is determined, a second section for "storing" information concerning the reference entity, and a third section for "storing" information concerning a topography direction along which the topography data is measured or calculated.

Moreover, even if Henderson's teachings are misconstrued to somehow disclose some sort of data storage format (which is not conceded as discussed above), such a format does not store the data and/or information defined by the claims. For example, the Office Action took the position that Henderson's "desired site" model corresponded to topography data and that Henderson's actual "site" model corresponded to information concerning the reference entity. However, nothing in Henderson specifies that its "actual site" model is the reference entity with respect to which the "desired" site model is determined. In fact, given the existence of differencing algorithm 102, it is clear that this could not possibly be the case. Rather, the existence of differencing algorithm 102 underscores the existence of an external reference, against which both the "actual site" model and the "desired site" model are both measured. It is thought that such a reference might be the "external reference" mentioned at Henderson's line 20 of column 3:

> "Using a known three-dimensional positioning system <u>with an external reference,</u> for example (but not limited to) 3-D laser, GPS, GPS/laser combinations or radar, machine or tool position coordinates are determined in block 100 as the machine moves over the site." (Emphasis added.)

Thus, Henderson measures his "actual site" and "desired site" models relative to some external reference, but this external reference is nowhere mentioned within block 104.

It is therefore respectfully submitted that the claims herein define subject matter patentable over Henderson, and allowance of the claims herein is respectfully requested.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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